

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2020-43-E - ORDER NO. 2020-440
JUNE 23, 2020

IN RE: Application of Dominion Energy South Carolina, Incorporated for a Certificate of Environmental Compatibility and Public Convenience and Necessity for the Construction and Operation of the Toolebeck - Aiken 230 kV Tie and Segments of the Graniteville #2 - Toolebeck 230 kV and Toolebeck - South Augusta 230 kV Tie, and Associated Facilities)	ORDER GRANTING A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC CONVENIENCE AND NECESSITY
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This matter comes before the Public Service Commission of South Carolina (“Commission”) on the Application of Dominion Energy South Carolina, Inc. (“DESC” or the “Company”) for a Certificate of Environmental Compatibility and Public Convenience and Necessity (“Certificate”) for the construction and operation of the Toolebeck - Aiken 230 kilovolt (“kV”) Tie and Segments of the Graniteville #2 - Toolebeck 230 kV and Toolebeck - South Augusta 230 kV Tie, and Associated Facilities (collectively, the “Proposed Toolebeck Lines Project”, “Proposed Lines” or “Lines”) in Aiken County, South Carolina. DESC filed this Application (the “Application”) on February 3, 2020. Contemporaneously with its filing,¹ DESC also served its Application on the South Carolina Office of Regulatory Staff (“ORS”), the chief executive officer of each affected

¹ S.C. Code Ann. § 58-33-120(2) (2015) requires that the South Carolina Department of Health and Environmental Control, South Carolina Department of Natural Resources, South Carolina Department of Parks, Recreation and Tourism, the County of Aiken, and the City of Aiken must be served with a copy of the Application and certification of the same be made by the Company to the Commission.

municipality, and the heads of each state and local governmental agency charged with the duty of protecting the environment, or of planning land use in the area, in the county in which any portion of the facility will be located as shown on Application Exhibit A, Figure 3.1-A. At the request of the Company, the Commission established this docket pursuant to the provisions in S.C. Code Ann. § 58-33-10 *et seq.* (2015 & Supp. 2019) (the “Siting Act”) and S.C. Code Ann. Regs. 103-304 (2012).

I. INTRODUCTION AND PROCEDURAL HISTORY

Upon the filing of DESC’s Application, the Commission issued and served electronically all parties listed in DESC’s Proof of Service with a Notice of Filing and Hearing and Pre-file Testimony Deadlines (“Notice”) prepared by the Clerk’s Office of the Commission (the “Clerk’s Office”) which described the nature of the Application and advised the interested parties of the manner in which they might intervene or otherwise participate in this proceeding. The public hearing was also scheduled at this time by the Clerk’s Office to begin at 10:00 a.m. on April 14, 2020.

By letter dated February 10, 2020, the Clerk’s Office instructed DESC to publish the Notice in newspapers of general circulation in the affected areas one time on or before February 18, 2020, and to provide proof of such publication to the Commission by March 3, 2020. The Company complied with the instructions received from the Clerk’s Office on February 12, 2020, by timely publishing the Notice and thereafter filing an affidavit of publication on February 18, 2020, attesting to publication as directed by the Clerk’s Office.

Pursuant to S.C. Code Ann. § 58-33-140(1)(c) and (d), parties seeking to intervene must do so within thirty (30) days from the date of service of the Application. The Notice

established March 3, 2020, as the date by which interested parties or entities could timely file Petitions to Intervene or present their views in writing to the Commission. No Petitions to Intervene were filed with the Commission. Pursuant to S. C. Code Ann. § 37-6-604(C) (2015 & Supp. 2019), the South Carolina Department of Consumer Affairs (“Consumer Affairs”) was provided notice of this Docket; however, Consumer Affairs did not intervene.

ORS is automatically a party to the certification proceeding in this Docket pursuant to S.C. Code Ann. §§ 58-4-10(B) (2015 & Supp. 2019) and 58-33-140(1)(b) (2015). The South Carolina Department of Health and Environmental Control (“SCDHEC”), South Carolina Department of Natural Resources (“SCDNR”), and South Carolina Department of Parks, Recreation and Tourism (“SCPRT”) (collectively, “Other Parties of Record”) are also automatically a party to the certification proceeding in this Docket based on the provisions of S.C. Code Ann. § 58-33-140 (2015). The Commission is informed by ORS and DESC that the Other Parties of Record were contacted about the Application and provided with a copy of the Stipulation to review prior to its execution. *See*, ORS and DESC’s Stipulation, dated March 27, 2020, p. 3.

On March 3, 2020, DESC filed the Direct Testimony and Exhibits of R. Scott Parker and Nathan V. Bass. On March 17, 2020, ORS filed the Direct Testimony of Brandon S. Bickley. No other parties filed testimony in this Docket.²

² DESC and ORS were the only parties to file testimony in this Docket, and they were the only parties participating in the virtual public hearing held by the Commission on April 14, 2020, other than attorney Jackie Dickman who appeared on behalf of the South Carolina Department of Health and Environmental Control, in accordance with S.C. Code Ann. § 58-33-130 of the Siting Act and the Commission’s Rules of Practice and Procedure. S.C. Code Ann. § 58-33-130 (2015); S.C. Code Ann. Regs. 103-800, *et. seq.* (2015 and Supp. 2019).

On March 27, 2020, ORS filed a Stipulation³ between it and DESC in this matter stating that they have each determined that their interests, as well as those of the public, would be best served by reaching an agreement on certain matters in DESC's Application.

The Stipulation sets forth that:

1. ORS will recommend that the Commission approve DESC's Application and grant DESC a Certificate for the Toolebeck - Aiken 230 kV Tie and Segments of the Graniteville #2 - Toolebeck 230 kV and Toolebeck - South Augusta 230 kV Tie, and Associated Facilities, as requested in the Application;
2. DESC agrees to notify ORS and the Commission once all necessary rights-of-way of the affected landowners are secured and provide proof that such rights have been obtained;
3. DESC agrees to follow all South Carolina, Commission, and local government regulations and laws arising from matters set forth in the Application; and
4. DESC will notify ORS and the Commission when the facilities begin commercial operation and of any changes to the planned commercial operation dates.

On March 27, 2020, ORS filed a Joint Motion on behalf of DESC and ORS for Expedited Review and Disposition without a Hearing ("Joint Motion"), requesting that the Commission use its discretionary authority to informally dispose of the proceeding without holding a public hearing, to accept the verified testimony of the DESC and ORS witnesses and to grant the relief sought by the Company. The Joint Motion was made in light of the challenges presented to facilitate effective social distancing measures enacted by the State of South Carolina⁴ in response to the 2019 Novel Coronavirus, the desire for DESC to

³Hearing Exhibit No. 1.

⁴ On March 13, 2020, Governor Henry D. McMaster issued Executive Order No. 2020-08, which declared a State of Emergency in South Carolina based on a determination that the 2019 Novel Coronavirus (COVID-19) "poses an actual or imminent public health emergency for the State of South Carolina."

begin purchasing materials for construction, and the absence of any opposition to the Application or any issue in controversy.

Attached to the Joint Motion were the verifications of the testimony of DESC witness R. Scott Parker, Manager of Transmission Planning for DESC; DESC witness Nathan V. Bass, PLA, Manager of the Facilities Planning and Siting Division of Pike Engineering, LLC, a subsidiary of Pike Corporation; and ORS witness Brandon S. Bickley, a Regulatory Analyst in the Energy Operations Department of ORS.

On April 8, 2020, the Commission denied the Joint Motion for Expedited Review and Disposition Without a Hearing and held that “[a] public hearing is specified in this matter under Code Section 58-33-130, and [the Commission] should move forward with this matter as scheduled on April 14, 2020 at 10:00 AM.” *See*, Order No. 2020-299. The Commission would conduct a virtual hearing, instead of an in-person hearing, on that scheduled date and time due to the State of Emergency in South Carolina and nation due to the 2019 Novel Coronavirus (COVID-19).

The public evidentiary hearing was held virtually in the Commission’s Hearing Room, beginning on April 14, 2020, at 10:00 a.m. to receive testimony from the parties and any public witnesses. The Honorable Comer H. “Randy” Randall, Chairman of the Commission, presided virtually with the other Commissioners present.⁵ DESC was virtually represented by K. Chad Burgess, Esquire, and Matthew W. Gissendanner, Esquire. Jackie Dickman, Esquire, appeared virtually on behalf of DHEC. ORS was

⁵ Commissioners present virtually are the Honorable Florence P. Belser, the Honorable Thomas J. “Tom” Ervin, the Honorable G. O’Neal Hamilton, the Honorable John E. “Butch” Howard, and the Honorable Swain E. Whitfield.

virtually represented by Jenny R. Pittman, Esquire, and Andrew M. Bateman, Esquire. Counsel for the other parties of record did not enter an appearance at the hearing.

The Commission staff were physically present in the Commission's Hearing Room, located at 101 Executive Center Drive, Suite 100, in Columbia, South Carolina, but no other party or person physically appeared for the public hearing (other than those appearing virtually). The public hearing was also live-streamed and broadcasted to the public and interested parties by the Commission.

Upon the opening of the evidentiary hearing, ORS moved to enter the Stipulation filed in this matter on March 27, 2020 and agreed between it and DESC as Hearing Exhibit No. 1. There were no opening statements. DESC presented and moved the verified pre-filed Direct Testimony of its witness, R. Scott Parker, and Exhibit RSP-1 of this witness as Hearing Exhibit No. 2 into the record. Next, DESC presented and moved the verified pre-filed Direct Testimony of its witness, Nathan V. Bass, and cumulative Exhibit NVB-1 from this witness as Hearing Exhibit No. 3 into the record.⁶ ORS then presented and moved the verified pre-filed Direct Testimony of its witness, Brandon S. Bickley, into the record. ORS had no opposition to the project. Other than attorney Jackie Dickman who appeared on behalf of statutory party South Carolina Department of Health and Environmental Control ("DHEC"), no other statutory parties named in S.C. Code Ann. § 58-33-140(1)(b) (2015) participated in the hearing. DHEC presented no witnesses, did not ask any questions, and did not oppose the project.

⁶ DESC and ORS were the only parties to file testimony in this Docket, and they were the only parties participating in the virtual public hearing held by the Commission on April 14, 2020 other than attorney Jackie Dickman who appeared on behalf of the South Carolina Department of Health and Environmental Control.

For the reasons set forth below, the Commission approves the Stipulation and grants the Certificate requested by DESC in the Application.

II. DISCUSSION OF LAW AND EVIDENCE

A. STATUTORY STANDARDS AND UNDERLYING LAW

The Utility Facility Siting and Environmental Protection Act (“Siting Act”), §§ 58-33-10 (2015 and Supp 2019), *et. seq.*, requires that, before constructing and operating new electric transmission lines and associated facilities with a designed operating voltage in excess of 125 kV, the owner obtain a Certificate from the Commission, provided, however, that the replacement of an existing facility with a like facility, as determined by the Commission, does not require a Certificate. S.C. Code Ann. § 58-33-110(1) (2015). The electric transmission lines and associated facilities outlined for construction in this Application necessitate DESC to secure a Certificate from the Commission.

In issuing such a Certificate, the Commission is required to make six findings. Those findings concern:

1. The basis of the need for the facility. S.C. Code Ann. § 58-33-160(1)(a) (2015);
2. The nature of the probable environmental impact of the facility. S.C. Code Ann. § 58-33-160(1)(b)(2015);
3. Whether the impact of the facility upon the environment is justified, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. S.C. Code Ann. § 58-33-160(1)(c) (2015);

4. Whether the facilities will serve the interests of system economy and reliability. S.C. Code Ann. § 58-33-160(1)(d) (2015);

5. Whether there is reasonable assurance that the proposed facility will conform to applicable state and local laws and regulations issued thereunder, including any allowable variance provisions therein, except that the Commission may refuse to apply any local law or local regulation that is unreasonably restrictive. S.C. Code Ann. § 58-33-160(1)(e) (2015); and

6. Whether public convenience and necessity require the construction of the facility. S.C. Code Ann. § 58-33-160(1)(f) (2015).

The Commission has considered each of these statutory standards based upon the evidence on the record in this proceeding. On that basis, Commission makes findings as set forth herein after considering and evaluating the evidence and the testimony of the witnesses.

B. SUMMARY OF TESTIMONY

1. R. Scott Parker

DESC presented the verified and sworn testimony of R. Scott Parker, who is the Manager of Transmission Planning for DESC. *Parker Dir. Test., p. 1, ln. 9-11*. Parker presented testimony related to the need and necessity for the Proposed Toolebeck Lines Project. *Parker Dir. Test., p. 3, ln. 10 – p. 4, ln. 19*. According to DESC witness Parker, the Company uses the North American Electric Reliability Corporation (“NERC”) Transmission Planning Standards, and as well adheres to its own Long-Range Planning Criteria, which supplement the NERC Transmission Planning Standards, in determining

when new transmission facilities are needed. *Parker Dir. Test.*, p. 5, ln. 1-13. Witness Parker further testified that the DESC Transmission System is designed in accordance with these standards and criteria:

“so that nothing more serious than local load impacts will occur during certain contingencies and so that after appropriate switching and re-dispatching, all non-radial loads can be served with reasonable voltages, and all facilities can again operate within acceptable operating limits. A sample of contingencies considered includes:

1. Loss of any generator;
2. Loss of any transmission circuit operating at a voltage level of 115 kV or above;
3. Loss of any transmission transformer;
4. Loss of any electrical bus and associated facilities operating at a voltage level of 115 kV or above;
5. Loss of all 115 kV or above circuits on a common structure;
6. Loss of entire generating capacity in any one generating plant;
7. Loss of any generating unit simultaneously with the loss of a single transmission line;
8. Loss of all components associated with a transmission circuit breaker failure; and
9. Loss of any generator, transmission circuit, or transmission transformer, followed by manual system adjustments, followed by the loss of another generator, transmission circuit, or transmission transformer (i.e. N-1-1 analysis).”

Id. at p. 5, ln. 15 – p. 6, ln. 13. In the testimony of witness Parker, he further states that DESC’s Transmission Planning studies have identified possible future contingency occurrences in the Aiken County area of its service area that would constitute violations of both NERC Transmission Planning Standards and DESC’s Long-Range Planning Criteria. *Parker Dir. Test.*, pp. 6-7. He also testified that additional electrical transmission paths are necessary between DESC and the South Carolina Public Service Authority (SCPSA) to prevent future excessive overloading conditions and to distribute the flow of power more reliably and evenly into the DESC system. *Parker Dir. Test.*, p. 7, ln. 13-22; p. 8, ln. 1-3.

These Company studies indicate that the two additional Southern Company's Plant Vogtle units #3 and #4 will add an additional 2,200 megawatts of generation over and above the existing 2,320 megawatts of generation from the existing two Plant Vogtle units and DESC has a tie-line directly connected to the Plant Vogtle Substation. *Parker Dir. Test., p. 7, ln. 5-12.*

Witness Parker continued to testify that, after studying multiple options within DESC, with the South Carolina Public Service Authority ("SCPSA"), and with Southern Company to decrease the power flow on these Aiken area outlet lines, DESC and SCPSA have agreed to establish the Toolebeck - Aiken 230 kV Tie and another 115 kV tie line. *Parker Dir. Test., p. 8, ln. 4-7.* DESC witness Parker testified "the Toolebeck - Aiken 230 kV Tie provides a significant path for power to flow out of the congested Aiken area and alleviate loading on the existing Aiken area 115 kV lines currently built with low ampacity conductor and with structures nearing their end-of-life." *Parker Dir. Test., p. 8, ln. 7-10.*

In addition to construction of the Toolebeck - Aiken 230 kV Tie, DESC witness Parker testified "this solution involves expanding the existing Toolebeck Switching Station to add 230 kV capability and folding the Graniteville #2 - South Augusta 230 kV Tie into the upgraded and renamed Toolebeck Transmission Substation." *Parker Dir. Test., p. 8, ln. 11-14.* Per DESC witness Parker, "not only will the new tie line decrease the power flow on the existing Aiken area electrical transmission outlet lines and more reliably and evenly distribute the flow of power into and around the DESC system, but the new tie line will also increase the transfer capacity for DESC's electrical transmission system to all interconnected utilities." *Parker Dir. Test., p. 8, ln. 14-19.*

DESC witness Parker testified that DESC Transmission Planning considered five alternatives to the present proposal to address the reliability concerns identified by DESC, but that such alternatives were not feasible due to (a) costs exceeding \$100 million, (b) the amount of stress constructing these alternatives would put on the operation of the DESC transmission system, and (c) the timeline for completion. *Parker Dir. Test., p. 9-11.* Having considered these various alternatives, DESC decided to pursue the present proposal, which is relatively easy to construct, more cost effective than the alternatives, and can be completed in the timeframe required. *Id.* DESC witness Parker testified that “[t]his alternative ... can be accomplished on mostly existing rights-of-way and requires a minimal amount of transmission outages, done in phases.” *Parker Dir. Test., p. 11, ln. 14-16.* Additionally, use of existing rights-of-way significantly minimizes potential for environmental, land use, cultural resource and scenic impacts, and eliminates costs associated with the acquisition of new rights-of-way; thus, DESC did not consider alternate green field routes for the construction of the Proposed Lines. *Parker Dir. Test., p. 12, ln. 3-18.*

DESC witness Parker further testified that “the Toolebeck - Aiken 230 kV Tie is planned to run between DESC's existing Toolebeck Switching Station in Aiken County, South Carolina, and the Interconnection Point with SCPSA approximately 0.7 miles east of SCPSA's existing Aiken Substation in Aiken County, South Carolina, primarily along existing rights-of-way for approximately 7.2 miles. The Toolebeck - Aiken 230 kV Tie will share single pole, double circuit (“SPDC”) structures with an existing 115 kV line. Both sides of the SPDC structures will be designed for 230 kV even though the existing

115 kV line will continue to operate at its existing voltage.” *Parker Dir. Test.*, p. 3, ln. 16- p. 4, ln. 2; see, *Hearing Exhibit No. 2 (RSP-1)*.

DESC witness Parker continued to describe the intended facilities and plans that the existing Graniteville #2 - South Augusta 230 kV Tie, which will connect the DESC and Southern Company electrical transmission systems, will be folded into the Toolebeck Switching Station in Aiken County. *Parker Dir. Test.*, p. 4, ln. 3 – 5. “The fold-in will run along 10.5 miles of existing right-of-way and approximately 0.1 miles of new right-of-way on SPDC structures from the Urquhart Junction, which is located approximately ten miles southwest of Aiken and six miles east of the Savannah River, to the Toolebeck Switching Station. Once the fold-in of the Graniteville #2 - South Augusta 230 kV Tie is complete, the two lines created by the fold-in will be renamed the Graniteville #2 - Toolebeck 230 kV and Toolebeck - South Augusta 230 kV Tie,” testified DESC witness Parker. *Parker Dir. Test.*, p. 4, ln. 5 - 12.

Mr. Parker also provided information regarding the associated facilities which would be added to DESC's transmission system. These include the 230 kV portion of the Toolebeck Switching Station, i.e., a bus and three 230 kV line terminals and power circuit breakers. *Parker Dir. Test.*, p. 4, ln. 13- 17. Once these upgrades are made, the existing Toolebeck Switching Station will be renamed the Toolebeck Transmission Substation upon completion of the upgrades. *Id.* DESC witness Parker also provided an overview of the proposed new tie and fold-in line segments on the map which is Hearing Exhibit No. 2.

The total cost of construction for the Proposed Lines and associated facilities is approximately \$27.1 million and is scheduled to be completed by December 31, 2021,

according to DESC witness Parker. *Parker Dir. Test., p. 13, ln. 3- 6.*

DESC witness Parker opined that these Proposed Lines and associated facilities are critical to the operational integrity of DESC's electrical transmission system,⁷ are necessary to ensure that the Company's system remains in compliance with NERC standards and its own Long-Range Planning Criteria,⁸ will improve power flow and prevent unacceptable thermal loading and System Operating Limit violations (as defined by NERC) on the transmission system in the southern region of DESC's electric service territory,⁹ and represent the most cost-effective proposal in light of system needs and constraints and the best long-term solution for the continued transmission of safe, reliable electric power to DESC's customers.¹⁰ According to DESC witness Parker, "[f]ailure to construct the Proposed Lines and associated facilities could result in unacceptable thermal loading and System Operating Limit violations on the electric transmission system in the northern and central regions of DESC's electric service area when Southern Company's new generation facilities at Plant Vogtle come online." *Parker Dir. Test., p. 14, ln. 17 - 22.* Therefore, DESC witness Parker further stated in his testimony that the Proposed Toolebeck Lines Project serves the interests of system economy and reliability. *Id.*

2. Nathan V. Bass

DESC presented the verified and sworn testimony of Nathan V. Bass, who is employed by Pike Engineering, LLC, and became Manager of its Facilities Planning and Siting ("FPS") Division after about six (6) years in January 2017. *Bass Dir. Test., p. 1, ln.*

⁷ *Parker Dir. Test., p. 14, ln. 14.*

⁸ *Parker Dir. Test., p. 14, ln. 15- 17.*

⁹ *Parker Dir. Test., p. 13, ln. 15- 19.*

¹⁰ *Parker Dir. Test., p. 13, ln. 11- 13.*

12-14; p. 2, ln. 4-15. Pike Engineering has offices in thirteen states and provides electrical transmission and distribution systems planning, siting, permitting, engineering and project management services to its electrical utility clients throughout the United States. *Bass Dir. Test., p. 1, ln. 15 - 17.* DESC witness Bass further stated in his testimony that he was the FBS project manager for the services rendered to DESC, then known as South Carolina Electric & Gas Company, on the Graniteville #2- South Augusta 230 kV Tie Line and Urquhart — Graniteville 230 kV Line project. *Bass Dir. Test., p. 2, ln. 19 – p. 3, ln. 1.* He provided testimony about the transmission line siting methodology utilized by DESC, in collaboration with FPS, to evaluate the route for Proposed Toolebeck Lines Project and associated facilities in Aiken County, South Carolina. *Bass Dir. Test., p. 3, ln. 9 - 16.* Pike Engineering conducted studies, compiled data and analyzed extensive information regarding environmental, land use, cultural resource, and visual effects, if any, that will result from constructing the Proposed Toolebeck Lines Project. *Id.* These studies were prepared under his supervision and authenticated by their author, witness Bass, in his testimony as Exhibit No. NVB-1 which is entitled Transmission Line Siting and Environmental Report for the Toolebeck – Aiken 230 kV Tie and Segments of the Graniteville #2 – Toolebeck 230 kV and Toolebeck – South Augusta 230 kV Tie and Associated Facilities, (“Environmental Report”). *Bass Dir. Test., p. 3, ln. 9 – 16; see, Hearing Exhibit No. 3 (NVB-1).* The Environmental Report details the research and studies conducted regarding the environmental, land use, cultural resource, and visual effects of the Proposed Toolebeck Lines Project and the associated facilities. The Environmental Report results indicate that there would not be a significant impact on the environment and

that the impact on cultural, land use, and scenic resources are minimized by the proposed routes. *Bass Dir. Test.*, p. 4, ln. 3 – 6; *Bickley Dir. Test.*, p. 6, ln. 6 – 11; see, *Hearing Exhibit No. 3 (NVB-1)*.

The Environmental Report is based on published literature and record reviews, aerial photography, and extensive field-work by biologists, botanists, cultural resource historians and others to ascertain the probable environmental impact of constructing and operating the Proposed Toolebeck Lines Project and the associated facilities along the selected routes primarily in existing right-of-way but for approximately 4.9 acres of new right-of-way at Urquhart Junction, Toolebeck Transmission Substation and the interconnection point. *Hearing Exhibit No. 3 (NVB-1)*, pp. 1-10. As detailed in the Environmental Report, biologists and botanists conducted field studies to ascertain whether the construction and operation of the Proposed Toolebeck Lines Project and the associated facilities were likely to have any adverse impact on any state or federally listed rare, threatened, or endangered plant or animal species. They determined that such species were not likely to be adversely affected by the Proposed Toolebeck Lines Project or the associated facilities. *Hearing Exhibit No. 3 (NVB-1)*, pp. 19-56. DESC witness Bass also testified that “no adverse effects to rare, threatened or endangered animal or plant species will occur as a result of construction and operation of the Lines” due to the absence of protected species in the existing and proposed right-of-way and due to no changes in the potential habitat for listed species other than minor vegetative clearing for maintenance of the right-of-way. *Bass Dir. Test.*, p. 6, ln. 12 – 18.

In addition, the biologists and botanists also conducted field studies to ascertain whether the construction and operation of the Proposed Toolebeck Lines Project and the associated facilities were likely to have any adverse impact on streams and wetlands. *Hearing Exhibit No. 3 (NVB-1), pp. 19-56.* Approximately 12.2 acres of wetlands, 0.8 acres of open water, and 1,160 linear feet of stream channels are present within the Proposed Toolebeck Lines Project's right-of-way. *Bass Dir. Test., p. 7, ln. 4 – 8; Hearing Exhibit No. 3 (NVB-1), p. 28.* DESC witness Bass further testified that, "because of the measures DESC takes to protect wetlands, stream buffer zones, streams and open waters during transmission line construction, minimal, if any, short-term and no longer-term impacts to waters ... will occur." *Bass Dir. Test., p. 7, ln. 8 - 11; Hearing Exhibit No. 3 (NVB-1), p. 53.*

These facts were set forth in DESC witness Bass's testimony and the various studies that form part of the Environmental Report prepared for the Proposed Toolebeck Lines Project and the associated facilities. Based on these facts, DESC witness Bass testified that "the short- or long-term impacts to environmental, cultural, land use and scenic resources, if any, as a result of the construction and operation of the [Proposed Toolebeck Lines Project and the associated facilities] are anticipated to be negligible." *Hearing Exhibit No. 3 (NVB-1), p. 49; see also, Bass Dir. Test., p. 5, ln. 13 – 15 ("the construction and operation of the Lines will not have any significant short- or long-term impacts on the environment.").*

As part of evaluating the environmental impact of the Lines' route and related construction, a cultural resource records review, windshield reconnaissance survey, and a

Phase I archaeological investigation were conducted by Brockington and Associates, Inc. (“Brockington”) in September and October 2019. *Bass Dir. Test.*, p. 8, ln. 4 – 7. DESC witness Bass testified that Pike Engineering engaged Brockington on behalf of DESC. *Id.* Brockington conducted background research to identify all previously recorded archaeological and architectural resources that reside within 1.25 miles of the Proposed Lines' route. *Bass Dir. Test.*, p. 8, ln. 8 – 10. Of the thirty-one (31) previously recorded archaeological sites within 1.25 miles of the Proposed Lines' route, Brockington determined that none of them will be affected by construction of the Lines because none are located within the existing or new DESC right-of-way. *Bass Dir. Test.*, p. 8, ln. 10 – 13. Seventy-one (71) previously recorded architectural resources were identified within 1.25 miles of the Proposed Lines' route during the background research. *Bass Dir. Test.*, p. 8, ln. 13 – 15.

DESC witness Bass testified that “after completing the background research, Brockington conducted the Phase I archaeological investigation in September and October 2019 in the existing right-of-way within which the Proposed Lines will be located.” *Bass Dir. Test.*, p. 8, ln. 16 – 18. The archaeological investigation included shovel test excavations at 30-meter intervals that led to the identification of one previously unrecorded archaeological resource, an isolated, historic artifact scatter, within the existing right-of-way of the Proposed Lines' route. *Bass Dir. Test.*, p. 8, ln. 18 – 22. The Brockington archaeological investigation also revealed to witness Bass that isolated finds are generally not eligible for the National Register of Historic Places (“NHRP”), and this isolated find did not support an argument for recommending it to the NHRP. *Bass Dir. Test.*, p. 9, ln.

1 – 3. Brockington’s field survey concluded that most of the project corridor had been disturbed by development with some areas situated in low-lying drainages with hydric soils; therefore, Brockington determined that the Proposed Toolebeck Lines Project will have no adverse effects on archaeological resources in the existing or new right-of-way of the Proposed Lines. *Bass Dir. Test., p. 9, ln. 3 – 9.* DESC witness Bass further testified that Brockington submitted the findings of the Phase 1 archaeological investigation to the State Historic Preservation Office (“SHPO”) in a report titled *Phase I Intensive Archaeological Resources Survey for the Toolebeck – Aiken 230 kV Tie and a Portion of the Graniteville #2 – Toolebeck 230 kV and Toolebeck – South Augusta 230 kV Tie and Associated Facilities* dated December 2019. *Hearing Exhibit No. 3 (NVB-1), Appendix C-1; see also, Bass Dir. Test., p. 9, ln. 8 – 13.* DESC witness Bass testified “the SHPO issued a letter on January 15, 2020, agreeing that Brockington’s cultural resources survey was sufficient and that no additional archaeological studies were necessary.” *Bass Dir. Test., p. 9, ln. 13 – 15.* Witness Bass further stated that there were no adverse impacts anticipated. *Bass Dir. Test., p. 9, ln. 15 – 18.*

DESC witness Bass testified that, “during the windshield reconnaissance survey conducted in September 2019, Brockington visited each of the 71 previously recorded architectural resources. Brockington determined that 18 of the documented resources no longer exist and that none of the remaining 53 previously recorded sites were located within the existing or proposed right-of-way in which the Proposed Lines are to be built. Of the 53 remaining sites, only six were determined to be eligible or potentially eligible for the NRHP. Brockington identified no previously unrecorded individual resources with

sufficient architectural integrity to be considered eligible for listing in the NRHP.” *Bass Dir. Test.*, p. 9, ln. 22 – p. 10, ln. 6. DESC witness Bass testified Brockington submitted a report, entitled *Literature Review and Reconnaissance of the Proposed Toolebeck – Aiken 230 kV Tie and Segments of the Graniteville #2 – Toolebeck 230 kV and Toolebeck – South Augusta 230 kV Tie and Associated Facilities*, to the SHPO on January 16, 2020. *Hearing Exhibit No. 3 (NVB-1), Appendix C-2*; see also, *Bass Dir. Test.*, p. 10, ln. 9 – 12.

Brockington recommended that the visual effects of the Lines be considered and for DESC to avoid construction where it will result in adverse effects to viewsheds of any NRHP listed or eligible resource. *Bass Dir. Test.*, p. 10, ln. 13 – 16. DESC witness Bass further testified that, in his professional opinion, the Proposed Toolebeck Lines Project and associated facilities will have no significant adverse visual effects to the region. *Bass Dir. Test.*, p. 12, ln. 13 – 14. DESC witness Bass explained that the Proposed Lines will have very low overall visual effects for following three reasons:

(1) except for 0.2 miles of new right-of-way clearing, “the Lines will be built within existing DESC right-of-way and will, therefore, not pose any significant visual modifications resulting from right-of-way clearing;” (*Bass Dir. Test.*, p. 12, ln. 1 – 4)

(2) “the Lines will share an existing DESC right-of-way, parallel, or be adjacent to existing DESC, SCPSA, or Central Electric Power Cooperative, Inc. transmission lines for the Lines' entire length; and” (*Bass Dir. Test.*, p. 12, ln. 5 – 7)

(3) “significant portions of the Lines route will traverse undeveloped areas where existing trees on each side of the right-of-way will provide significant screening.” (*Bass Dir. Test.*, p. 12, ln. 8 – 12)

DESC witness Bass reiterated the similar statements made by DESC witness Parker about the Lines Project. He testified in his professional judgment that, when compared with other construction options, building the Proposed Toolebeck Lines Project and associated facilities almost entirely within the existing right-of-way significantly minimizes the potential for environmental, land use, cultural resource and scenic impacts, is proper instead of using other greenfield routes, and is a superior solution to support long-term electrical system reliability. *Bass Dir. Test., p. 12, ln. 20 – p. 13, ln. 11.* In his testimony, DESC witness Bass opined based upon his work and study that the impact of the Proposed Lines and the associated facilities upon the environment was justified considering the state of available technology and the nature and economics of the various alternatives. *Bass Dir. Test., p. 12, ln. 20.*

3. Brandon S. Bickley

ORS presented the verified and sworn testimony of Brandon S. Bickley, who is a Regulatory Analyst with the ORS in its Energy Operations Department. *Bickley Dir. Test., p. 1, ln. 15 - 16.* The purpose of Bickley’s testimony is to provide the results of ORS’s review of DESC’s Application to construct and operate one 230 kV transmission line and two 230 kV line segments known as the Proposed Toolebeck Lines Project and associated facilities which was performed by witness Bickley or under his supervision. *Bickley Dir. Test., p. 2, ln. 17 – p. 3, ln. 1.* ORS witness Bickley testified that the additional Proposed Toolebeck Lines Project and associated facilities will ensure that DESC’s system “remains in compliance with NERC standards and its own Long Range Planning Criteria” due to anticipated heavy loading on existing Aiken area electrical transmission outlet lines related

to schedules for Southern Company's Vogtle Units 3 and 4 providing an addition of approximately 2,200 MWs of solar generation. *Bickley Dir. Test.*, p. 4, ln. 11 – p. 5, ln. 7; p. 7, ln. 1-2.

ORS witness Bickley also confirmed that DESC evaluated six (6) scenarios to address overloading in the Aiken area; however, five (5) of the six (6) scenarios were not feasible due to the time constraints, cost, stress on the operation of the DESC transmission system, difficulty with construction and potential issues with right-of-way. *Bickley Dir. Test.*, p. 5, ln. 10 – 15. He also confirmed that DESC's Application provided the information required by S.C. Code Ann. § 58-33-10 *et seq.* (2015 & Supp. 2019) (also known as the "Siting Act") when submitting the Transmission Line Siting and Environmental Reports and provided a description of the facilities, their location, intended use and need. *Bickley Dir. Test.*, p. 5, ln. 18 – p. 6, ln. 3.

ORS witness Bickley further affirmed that, as part of their review of DESC's Application, ORS communicated with SCDHEC, SCPRT and SCDNR about the Proposed Toolebeck Lines Project and results of the Environmental Report which concluded that there is no significant impact on the environment and that impact on cultural, land use, and scenic resources are minimized by the proposed routes. *Bickley Dir. Test.*, p. 6, ln. 6 – 18; *see, Hearing Exhibit No. 3 (NVB-1)*. Witness Bickley also stated that SCPRT did advise ORS in response to its inquiry that SCPRT was not planning on commenting or submitting testimony in this proceeding; therefore, ORS concluded that the Environmental Report filed in the proceeding by DESC adequately addressed the environmental impacts of the Proposed Lines. *Id.* He also confirmed that ORS concluded the Proposed Lines will

enhance the reliability of DESC's system. *Bickley Dir. Test., p. 7, ln. 1 – 2.*

ORS witness Bickley further testified DESC gives reasonable assurance that the Proposed Lines will conform to all applicable state and local laws and regulations, as well as that DESC will obtain the additional new rights-of-way on four non-DESC-owned property totaling approximately 4.82 acres and that DESC has already obtained two of these four properties while engaging in discussions for the other two rights-of-way. *Bickley Dir. Test., p. 7, ln. 6 – 20.* He also advised that no comments had been filed in this proceeding regarding DESC's request for a certificate for these additional transmission lines. *Bickley Dir. Test., p. 7, ln. 9 – 12.*

Lastly, ORS witness Bickley further testified that “the construction of the Proposed Lines and associated facilities will enhance the reliability of the electrical system in growing areas of the Company's service territory and will help provide reliable and high quality service for customers” which assessment is based upon the Company's Application, as well as testimony by the Company, reassuring that the Proposed Lines should distribute the flow of power more reliably and evenly into the DESC system, prevent future excessive loading conditions, and increase the transfer capacity for DESC's electrical transmission system for all interconnected utilities. *Bickley Dir. Test., p. 8, ln. 1 – 10.* He also testified that ORS concluded that the public convenience and necessity are served by the proposed transmission lines, which will have a minimal impact on the environment and provide system economy and reliability of service to DESC's Aiken-area service territory. *Bickley Dir. Test., p. 8, ln. 11 – 16.*

III. FINDINGS OF FACT AND CONCLUSIONS OF LAW

Based upon the Discussion, Findings of Fact as set forth herein, and the record of the instant proceeding, the Commission makes the following Findings of Fact and Conclusions of Law:

1. DESC is engaged in the business of generating, transmitting, distributing and selling electric power and energy to the general public within its service territory in the State of South Carolina and is subject to the regulation and jurisdiction of the Commission.

2. DESC seeks authority from the Commission to construct and operate the Toolebeck - Aiken 230 kilovolt (“kV”) Tie and Segments of the Graniteville #2 - Toolebeck 230 kV and Toolebeck - South Augusta 230 kV Tie, and Associated Facilities (collectively, the “Proposed Toolebeck Lines Project”, “Proposed Lines” or “Lines”) pursuant to S.C. Code Ann. § 58-33-10 *et seq.* (2015 & Supp. 2019) (the “Siting Act”) and S.C. Code Ann. Regs. 103-304 (2012).

3. The Proposed Toolebeck Lines Project includes the construction of a new 230 kilovolt (kV) transmission line in Aiken County, South Carolina, to be called “Toolebeck – Aiken 230 kV Tie” and the use of an existing 230kV transmission line that DESC will fold into the existing Toolebeck Switching Station in Aiken County which Station shall be renamed the “Toolebeck Transmission Substation” due to the addition of needed associated facilities to complete this Project.

4. Connecting DESC and SCPSA’s electrical transmission systems, this new 230 kV tie line (Toolebeck – Aiken 230 kV Tie) is planned to run between DESC's existing

Toolebeck 115 kV Switching Station in Aiken County, South Carolina, and the Interconnection Point with SCPSA approximately 0.7 miles east of SCPSA's existing Aiken Substation in Aiken County, South Carolina, primarily along DESC existing rights-of-way for approximately 7.2 miles. The Toolebeck — Aiken 230 kV Tie will share single pole, double circuit ("SPDC") structures with an existing 115 kV line and will be owned and operated by DESC from its Toolebeck 115 kV Switching Station to the SCPSA Interconnection Point. Both sides of the SPDC structures will be designed for 230 kV even though the existing 115 kV line will continue to operate at its existing voltage. From the SCPSA Interconnection Point, the line will continue for approximately 0.7-miles into SCPSA's Aiken Substation. This 0.7-mile segment of line will be built, owned, and operated by SCPSA.

5. The other part of the Proposed Toolebeck Lines Project includes DESC's Graniteville #2 – South Augusta 230 kV Tie and a new 230 kV tie. The existing tie, which currently connects DESC and Southern Company electrical transmission systems, will be folded into the Toolebeck 115 kV Switching Station in Aiken, South Carolina. This new fold-in will utilize the existing Urquhart – Toolebeck 115 kV corridor for approximately 10.5 miles and approximately 0.1 miles of new right-of-way. Once the Graniteville #2 – South Augusta 230 kV Tie line is folded in, these two 230 kV line segments will be renamed to the Graniteville #2 – Toolebeck 230 kV and the Toolebeck – South Augusta 230 kV Tie.

6. The associated facilities for the Proposed Toolebeck Lines Project by DESC that will be added to DESC's transmission system with these lines as described above, and

herein, will be the 230 kV side of the Toolebeck 115 kV Switching Station including the addition of three 230 kV terminals, bus and multiple 230 kV power circuit breakers. The Toolebeck Switching Station currently has only 115 kV capability; however, with this new Project, 230 kV will be added, and the Switching Station renamed the “Toolebeck Transmission Substation.” These associated facilities will be built within property already owned by DESC, and which property has already been cleared, graded, and fenced.

7. The Commission finds DESC witness Parker’s testimony and analysis to be credible concerning the need and necessity for the Proposed Toolebeck Lines Project and associated facilities and the Lines Project’s contribution to DESC’s electrical transmission system economy and reliability to ensure safety, reliability, and adequacy in the internal DESC transmission system and its interconnection transmission facilities with other utilities.

8. The Commission further finds that ORS witness Bickley, who did corroborate the testimony of DESC witness Parker, to be credible and that witness Bickley testified concerning ORS’s review of DESC’s Application for a Certificate confirming the need for these Proposed Lines and associated facilities to prevent electrical overloading and maintain system reliability.

9. With regard to the testimony of DESC witness Parker, the Commission finds that, with DESC’s expecting an additional 2,200 megawatts of generation from solar generators on its system, there is need for the construction proposed in this proceeding to prevent electrical overloading and to distribute the flow of power more reliably and evenly.

10. The Commission finds that the evidence presented to the Commission by DESC and ORS support a finding by the Commission that the Proposed Lines and the associated facilities are needed,¹¹ that they serve the interests of system economy and reliability,¹² and that they are required by public convenience and necessity.¹³

11. The Commission finds that the testimony and analysis provided by DESC witness Bass to be credible, as well as his Environmental Report¹⁴ based upon the literature and record reviews and extensive field-work by biologists, botanists, cultural resource historians and others used to ascertain the probable environmental impact of constructing and operating the Proposed Lines and associated facilities along the selected routes, which are primarily within existing rights-of-way owned by DESC.

12. Based upon the evidence in the record, specifically the Environmental Report and testimony of DESC witness Bass attesting that there will be no significant short- or long-term impacts on the environment, and the testimony of ORS witness Bickley concluding that DESC addressed the environmental impacts of the Proposed Lines, the Commission finds that the Proposed Toolebeck Lines Project and associated facilities provides the most cost effective manner to serve and enhance the electrical transmission system and its reliability, as well as to minimize the short-term and long-term impacts on the environment, land use, cultural resources and aesthetics.

13. Based upon the record of evidence presented by DESC and ORS, the Commission further finds that the environmental impacts of the Proposed Toolebeck Lines

¹¹ S.C. Code Ann. § 58-33-160(1)(a) (2015).

¹² S.C. Code Ann. § 58-33-160(1)(d) (2015).

¹³ S.C. Code Ann. § 58-33-160(1)(f) (2015).

¹⁴ *Hearing Exhibit No. 3 (NVB-1)*.

Project and associated facilities has been appropriately evaluated, described in the testimony and exhibits, and are not significant, but minimal if any.¹⁵

14. The Commission also finds, based upon the above, that these minimal or not significant impacts are justified considering the state of available technology, and the nature and economics of the various alternatives to the proposed siting and location of the Proposed Toolebeck Lines Project and associated facilities.¹⁶

15. The Commission finds that the Proposed Toolebeck Lines Project and associated facilities represent a feasible, appropriate and cost-effective means for maintaining electrical transmission system reliability and for providing safe, reliable electric service to DESC's area customers.

16. The Commission finds that DESC has shown public convenience and necessity for the construction, operation and maintenance of the Proposed Toolebeck Lines Project and associated facilities.

17. Based upon the above, the Commission further finds that public convenience and necessity support the issuance of a certificate for the construction, operation and maintenance of the Proposed Toolebeck Lines Project and associated facilities.

18. Based upon the sworn testimonial assurance by DESC witness Parker, the Commission finds that the Proposed Toolebeck Lines Project and associated facilities will be constructed and operated in conformity with all applicable state and local laws and

¹⁵ S.C. Code Ann. § 58-33-160(1)(b) (2015).

¹⁶ S.C. Code Ann. § 58-33-160(1)(c) (2015).

regulations;¹⁷ and therefore the Commission requires the same of DESC concerning this Project.

19. The Commission finds that DESC has shown it will construct, operate and maintain the Proposed Toolebeck Lines Project and associated facilities in conformity with all applicable state and local laws and regulations.¹⁸

20. The Commission finds that DESC has shown the basis of the need for the Proposed Toolebeck Lines Project as necessary to prevent not only unacceptable thermal loading and System Operating Limit violations as defined by NERC on its transmission system in the Aiken area, but also to ensure that DESC remains in compliance with applicable NERC Reliability Standards.

21. The Commission finds that DESC has shown that the probable environmental impact from the construction, operation, and maintenance of the Proposed Toolebeck Lines Project and associated facilities is not significant, but minimal if any, and that such impact is justified given the state of available technology and the nature and economics of the various alternatives and other considerations.

22. The Commission also finds that DESC selected the route for the Proposed Toolebeck Lines Project and associated facilities in a way that appropriately minimizes environmental, land use, cultural resource, and aesthetic effects.

¹⁷ S.C. Code Ann. § 58-33-160(1)(e) (2015).

¹⁸ S.C. Code Ann. § 58-33-160(1)(e) (2015).

23. The Commission further finds that DESC has shown the Proposed Toolebeck Lines Project and associated facilities shall serve the interests of economy and reliability.

24. The Commission finds that the statutory standards of South Carolina Code of Laws §§ 58-33-160(1)(a), (b), (c), (d), (e) and (f) are fully met by the evidence in the record provided by the parties regarding construction, operation, and maintenance of the Proposed Toolebeck Lines Project and associated facilities for the Commission to grant a Certificate to DESC.

IV. ORDERING PROVISIONS

IT IS THEREFORE ORDERED THAT:

1. The Application of DESC for a Certificate of Environmental Compatibility and Public Convenience and Necessity is hereby approved and, accordingly, the Certificate is granted for the construction of the Toolebeck – Aiken 230 kV Tie and Segments of the Graniteville #2 – Toolebeck 230 kV and Toolebeck – South Augusta 230 kV Tie, and Associated Facilities (i.e., Toolebeck Lines Project and associated facilities).

2. DESC shall, and is required to, follow all applicable Commission, state, and local government regulations and laws arising from this matter as set forth in their Application concerning the construction, operation, and maintenance of the Proposed Toolebeck Lines Project and associated facilities.

3. The Stipulation between DESC and ORS is hereby approved by the Commission. *See*, ORS and DESC's Stipulation, dated March 27, 2020.

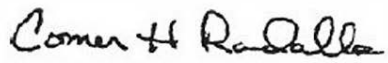
4. DESC shall notify the Commission and ORS once all necessary rights-of-way of the affected landowners are secured for the additional new rights-of-way on four non-DESC-owned properties totaling approximately 4.82 acres, and DESC shall provide proof that such rights-of-way have been obtained.

5. DESC shall notify the Commission and ORS of the commercial operation of the Toolebeck Lines Project and associated facilities within ten (10) days of such operation.

6. DESC shall notify the Commission and ORS regarding any changes to the planned commercial operation dates.

7. This Order shall remain in full force and effect until further order of the Commission.

BY ORDER OF THE COMMISSION:


Comer H. "Randy" Randall, Chairman

ATTEST:


Jocelyn Boyd, Chief Clerk/Executive Director